



PTO/SB/C8a/s (08-03)

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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/789,100-Conf. #7692	
			Filing Date	February 27, 2004	
			First Named Inventor	Douglas S. Lacy	
			Art Unit	3644	
			Examiner Name	S. A. Holzen	
Sheet	1	of	1	Attorney Docket Number	030048107US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-10/671,435		Kelley-Wickemyer	
		US-10/770,256		Speer	
		US-2004-0195464-A1	10-07-2004	Vassberg et al.	
		US-20050011994-A1	01-20-2005	Sakurai et al.	
		US-20050017126-A1	01-27-2005	McLean et al.	
		US-6,799,739	10-05-2004		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.88(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IPW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	9/14/05
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	<i>Stephen A. Holzen</i>	Date Considered	8/30/05
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		Number-Kind Code ² (if known)			
SL		US-2,938,680	05-31-1960	Lawrence et al.	
		US-5,039,032	08-13-1991	Rudolph	

FOREIGN PATENT DOCUMENTS						
Examiner Initials ⁶	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
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SL		International Search Report for PCT/US2005/005233; Applicant: The Boeing Company; European Patent Office; dated June 1, 2005 (3 pgs)	

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Examiner Signature	<i>Steph A. H. Z.</i>	Date Considered	8/30/05
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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/005233

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B64C9/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B64C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 293 110 A (MIDDLETON ET AL) 6 October 1981 (1981-10-06) abstract figures 4A,7	1-50
A	US 5 039 032 A (RUDOLPH ET AL) 13 August 1991 (1991-08-13) abstract column 2, line 60 - line 62 column 3, line 16 - line 19 figures 3,7,9	1-50
A	US 2 938 680 A (GREENE LAWRENCE P ET AL) 31 May 1960 (1960-05-31) column 3, line 59 - column 4, line 9 figure 1	1-50

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

20 May 2005

Date of mailing of the international search report

01/06/2005

Name and mailing address of the ISA

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Authorized officer

Estrela y Calpe, J

Stephane 8/30/05

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/005233

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4293110	A	06-10-1981	NONE	
US 5039032	A	13-08-1991	NONE	
US 2938680	A	31-05-1960	NONE	